

**Whiting Mothership Cooperative**

An Amendment 20 Mothership Catcher Vessel Cooperative

Annual Report on the 2023 Pacific Whiting Fishery

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## **Introduction**

In March of 2011, the owners of the 37 trawl limited entry catcher vessel permits (MS/CV LEPs) endorsed for operation in the Mothership sector of the Pacific whiting fishery formed a fishing cooperative to coordinate harvesting efforts. This cooperative is the Whiting Mothership Cooperative (WMC). Following transfers of MSCV catch history assignments (CHAs), there are currently 34 endorsed permits, three of which carry two MSCV CHAs. The owners of all of the current MS/CV LEPs remained members in good standing for the 2023 fishing year.

The WMC receives an allocation of whiting based on the cumulative catch histories of the members of the cooperative. The WMC operates under the WMC Membership Agreement contract which allocates whiting to members proportionate to the contribution to the cooperative's allocation made by NMFS on the basis of the whiting catch history assigned to the Cooperative by the members.

One of the primary purposes of the WMC cooperative is the management of bycatch of constraining rockfish species and Chinook salmon. To that end the members of the WMC have all signed a WMC Bycatch Agreement that sets out the rules for modification of fishing behavior with which members are obligated to comply.

## **Purpose of Report**

This report is intended to disclose all information required or identified in Federal Regulations at 50 CFR 660.113(d)(3). The catch data in this report is for the 2023 fishing year beginning May 1 and ending December 31. The catch data was provided by Sea State, Inc. and was obtained from the NMFS – At-Sea Hake Observer Program.

## **Reporting Requirements**

The required Annual Report elements (i-v) are found in the 50 CFR 660.113(d)(3)

*(3) Annual coop report. The designated coop manager for the mothership coop must submit an annual report to NMFS and the Council by March 17 each year, before a coop permit is issued for that year. The annual coop report will contain information about the previous year's fishery, including:*

*(i) The mothership sector's annual allocation of Pacific whiting and the permitted mothership coop allocation;*

*(ii) The mothership coop's actual retained and discarded catch of Pacific whiting, salmon, Pacific halibut, rockfish, groundfish, and other species on a vessel-by- vessel basis;*

*(iii) A description of the method used by the mothership coop to monitor performance of coop vessels that participated in the fishery;*

*(iv) A description of any actions taken by the mothership coop in response to any vessels that exceed their allowed catch and bycatch; and*

*(v) Plans for the current year's mothership coop fishery, including the companies participating in the cooperative, the harvest agreement, and catch monitoring and reporting requirements.*

**(i) Annual allocation of Pacific whiting to the WMC coop**

The Mothership sector of the Pacific Whiting fishery was initially allocated 91,247 metric tons of whiting, followed by a re-apportionment on September 28th of 10,800 metric tons, for a total of 102,047 metric tons. 100% of the Mothership sector whiting was allocated to the Whiting Mothership Cooperative.

**(ii) The Mothership coop's actual retained and discarded catch of Pacific whiting, salmon, Pacific halibut, rockfish, groundfish, and other species on a vessel-by-vessel basis**

All 33 of the current MS/CV endorsed trawl limited entry permit holders joined the Whiting Mothership Cooperative (WMC). As of December 31st, 2023, seventeen MS/CVs had fished in the MS sector of the whiting fishery, harvesting 32,910 metric tons of whiting. Data on the catch of Whiting, Salmon, Halibut, Rockfish, Groundfish and Other Species, as of December 31, 2023, is shown in tables 1-5 (Attachment 1). In interpreting the tables a cell with "0.00 mt" indicates at least a trace amount of this species was caught; a blank cell indicates no amount of that species was caught.

Note: Some species were not included in the table because there was no catch reported in the data. Salmon are reported in numbers. Halibut, Dungeness crab and eulachon data are reported in metric tons, as the data on numbers of fish was not available.

**(iii) A description of the method used by the mothership coop to monitor performance of coop vessels that participated in the fishery**

The WMC retains Sea State, Inc. as the Monitoring Agent for the coop. All WMC members provide confidentiality waivers to allow Sea State, Inc. to access NMFS Observer data and location data from VMS providers in real time.

The WMC provided Sea State, Inc. with a harvest schedule of each MS/CVs share of whiting and pro-rata portion of the allocated bycatch species. Sea State, Inc. queries the NORPAC observer database to obtain the Mothership observer reports on a daily basis. Sea State, Inc. uses this data to produce daily reports which are distributed by email to all WMC members, the Coop manager, and to the Mothership processors.

The Sea State, Inc. daily report shows several tables of information, including:

- daily catch and bycatch amounts for the fleet as a whole for most recent 10 days,
- the overall YTD rates and percent of whiting quota and bycatch harvested for the fleet in aggregate,
- the YTD bycatch rates for each Mothership's fleet,
- the YTD bycatch rates and amounts for each vessel,
- the percent and amounts of whiting quota and bycatch allocations harvested by each seasonal pool,
- the balance of whiting available in each seasonal pool by vessel.

As MS/CV observers are debriefed, their data is incorporated into NORPAC and Sea State, Inc. updates its accounting accordingly. On the basis of the Sea State, Inc. data, the Coop manger audits vessel harvest amounts relative to the individual members' share of the quota and transfers between members to see that the coop's allocations are not exceeded.

In addition to the email distribution of the daily report, Sea State maintains a website for the Coop where members can access this information. The website also provides GIS mapping of VMS tracks of any hauls where bycatch rates exceed a base rate. These high bycatch maps are shared with the shorebased and catcher-processor cooperatives and provide members access to historic and current hotspots with high resolution mapping.

A copy of a Sea State daily report from the last week of the fishery is included as Attachment 2.

**(iv) A description of any actions taken by the mothership coop in response to any vessels that exceed their allowed catch and bycatch**

No vessels exceeded their allowed whiting catch amounts under the Coop Agreement. The Coop makes vessel specific whiting allocations; however, the bycatch allocations are managed as a common pool resource. This is not to say that vessels are not subject to individual accountability measures for bycatch performance.

The Coop agreement includes a variety of measures that serve to mitigate against the possibility of exceeding allowed catch limits. These include:

- Precautionary closures of past bycatch hotspots
- Night fishing restrictions
- Fleet relocation triggers and fleet to fleet reporting
- Required test tows upon relocation to new fishing area
- In season “hot spot” closure authority
- Seasonal apportionments (“pools”) of whiting and bycatch allowances
- Sanctions against vessels that have exceeded a bycatch rate within a seasonal pool.

Precautionary Closures of Past Bycatch Hotspots

Prior to the beginning of the 2011 whiting fishery, the WMC created a “Bycatch Committee” which met several times to develop proposed closures that would apply seasonally. The committee reviewed GIS analysis of 10 years of at-sea observer data overlaid on fine scale bathymetry. The analysis included bycatch rates and amounts as well as amounts of whiting. VMS track-lines of high bycatch tows were also incorporated in the review. Additionally, the committee reviewed logbook information from individual captains’ historic directed rockfish experience, which provided insight into habitat associations for rockfish species.

The committee ended up recommending closure of 9 areas, totaling nearly 2000 square kilometers, which were adopted by the WMC board. The board also identified several other “cautionary” areas.

Night Fishing

Based on the recommendations of the bycatch committee, the board retained the following night fishing restriction: From the annual opening date of the MS sector of the Pacific whiting fishery through August 31 of such fishing year, no vessel harvesting Pacific whiting from the MS sector allocation shall

fish between 10:00 pm and 5:30 am Pacific time *except outside 200 fathoms*. From September 1 through December 31 of such fishing year, no vessel harvesting Pacific whiting from the MS sector allocation shall fish between 10:00 pm and 5:30 am Pacific time, *except outside 100 fathoms*.

#### Fleet Relocation and Real Time Fleet to Fleet Reporting

The Coop established Base Rates which were based on the pro-rata amounts of bycatch allocations relative to whiting allocations to the MS sector. Each Mothership processor maintains a spreadsheet reporting its fleet performance, measured against the Base Rates. The spreadsheet reports are shared each day between all the processing ships.

Each fleet's performance relative to the Base Rates constitutes a trigger requiring the fleet to relocate if they encounter a bycatch "hotspot". Relocation is required in the event of any of the following situations:

- If a fleet's three day rolling average rate exceeds the Base Rate for any bycatch species, and that Fleet's cumulative year to date bycatch rate exceeds half of the Base Rate for that species,
- If a fleet's three day rolling average rate exceeds 125% of the Base Rate for a bycatch species
- If a fleet's bycatch rate during any single day exceeds 200% the Base Rate for a bycatch species,

This real time mechanism for response to bycatch encounters coupled with a requirement for test tows upon entering a new area, have served to limit bycatch.

#### In-season Hot Spot Closures

The WMC board delegated authority to Sea State, Inc. to impose "In-season Hot Spot Closures" if they perceive a problem. This authority was used during the 2018 season to respond to high Chinook encounters. In response to Shortbelly rockfish encounters in 2019, the WMC provided authority to the Coop manager to also implement and remove hotspot closures as necessary to avoid bycatch events. In 2022, the Coop manager utilized this authority to respond to Sablefish bycatch and closed an apparent hot spot.

#### Seasonal Pools

The Coop agreement provides for dividing the whiting allocation into five pools with various start dates. Each pool received a share of the bycatch allocations pro-rata to whiting. The Coop Agreement provides that if a pool reaches its share of the bycatch prior to harvesting its whiting allocation, the members of the pool must cease fishing.

#### Sanctions Against Member Vessels

In the event that a pool closes because of bycatch, if a member of that pool has a cumulative bycatch amount exceeding their pro-rata share by 25%, that vessel is restricted from harvesting additional whiting in a subsequent seasonal pool.

#### Closure of At-Sea Sectors

The WMC suspended fishing November 1, 2023. There were no violations of the WMC Bycatch Agreement.

**(v) Plans for the next year's mothership coop fishery, including the companies participating in the cooperative, the harvest agreement, and catch monitoring and reporting requirements.**

The WMC provides that membership in the Coop continues in the following year unless a member provides notice of intent to withdraw before November 1st. No members filed notice of intent to withdraw. The ownership of member permits is shown in Exhibit A of the WMC Membership Agreement (Attachment 3 & Exhibits) filed with the MS cooperative permit application NMFS for the 2024 season.

**Attachments:**

- 1-** WMC's actual retained and discarded catch of Pacific whiting, salmon, Pacific halibut, rockfish, groundfish, and other species on a vessel-by- vessel basis
- 2-** Sea State daily report from the last week of the fishery
- 3-** WMC Membership Agreement, with Exhibits
  - a)** Exhibit A – Membership List
  - b)** Exhibit B – Harvest Schedule of Allocation Percentages
  - c)** Exhibit C – Whiting Bycatch Agreement
  - d)** Exhibit D – Signature Pages – Whiting Membership Agreement
- 4-** 2018 Addendum to WMC Membership Agreement
- 5-** 2022 Addendum to WMC Membership Agreement
- 6-** 2022 Amendment to the WMC Membership Agreement
- 7-** Whiting Mothership Cooperative Salmon Mitigation Plan Postseason Report 2023

**Attachment 1**

WMC’s actual retained and discarded catch of Pacific whiting, salmon, Pacific halibut, rockfish, groundfish, and other species on a vessel-by- vessel basis.

Table 1. Retained and discarded catch of Pacific whiting (mt) by vessel.

	American Beauty	Leslie Lee	Lisa Melinda	Marathon	Miss Berdie	Miss Sarah	Muir Milach	Nordic Fury	Nordic Star	Pacific Challenger	Pegasus	Predator	Raven	Sea Storm	Seadawn	Seeker	Traveler	Total
Retained	2,413	138	2,741	3,412	1,188	992	3,915	682	2,191	3,760	1,395	1,357	1,978	3,556	974	1,018	646	32,354
Discard	18	1	56	36	28	4	107	9	70	72	24	13	21	56	3	35	5	557

Table 2. Retained Salmonids by vessel (# fish)

	American Beauty	Leslie Lee	Lisa Melinda	Marathon	Miss Berdie	Miss Sarah	Muir Milach	Nordic Fury	Nordic Star	Pacific Challenger	Pegasus	Predator	Raven	Sea Storm	Seadawn	Seeker	Traveler	Total
Coho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chinook	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 3. Discarded Salmonids by vessel (# fish).

	American Beauty	Leslie Lee	Lisa Melinda	Marathon	Miss Berdie	Miss Sarah	Muir Milach	Nordic Fury	Nordic Star	Pacific Challenger	Pegasus	Predator	Raven	Sea Storm	Seadawn	Seeker	Traveler	Total
Coho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chinook	45	0	12	124	3	79	151	35	119	270	8	11	41	130	24	58	106	1,217

Table 4. Retained Non-whiting and non-salmonid catch by vessel (mt).

	American Beauty	Leslie Lee	Lisa Melinda	Marathon	Miss Berdie	Miss Sarah	Muir Milach	Nordic Fury	Nordic Star	Pacific Challenger	Pegasus	Predator	Raven	Sea Storm	Seadawn	Seeker	Traveler
American Shad	0.00	0.00	0.00	0.37	0.00	0.05	0.00	0.00		0.00	0.00	0.20	0.00	0.00	0.35	0.00	0.00
Argentine Unidentified				0.00									0.00	0.00			
Arrowtooth Flounder	0.12	0.00	0.00	0.20	0.00	0.25	0.00	0.00	0.00	0.09	0.00	0.07	0.08	0.14	0.17	0.00	0.00
Ascidian - Sea Squirt - Tunicate Unident.	0.00		0.00	0.00			0.00		0.00	0.00	0.00		0.00	0.00			
Aurora Rockfish				0.00			0.00	0.00	0.00	0.00			0.00	0.00			
Bank Rockfish	0.00			0.00		0.00		0.00		0.00			0.00	0.00			0.00
Barnacles Unidentified				0.00									0.00	0.00			
Barracudina Unidentified	0.00			0.00			0.00			0.00			0.00	0.00			
Big Skate				0.00					0.00				0.00	0.00	0.00		
Blackgill Rockfish				0.00		0.00							0.00	0.00			
Blue King Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blue Shark			0.00	0.00			0.00		0.00		0.00		0.00	0.00			
Bocaccio	0.01	0.00		0.07		0.04				0.07		0.10	0.01	0.01	0.05	0.00	
Brittle Starfish Unidentified				0.00									0.00	0.00			
Brown Cat Shark	0.00		0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00
Canary Rockfish	0.01	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.06		0.04	0.01	0.00	0.07		0.00
Capelin				0.00									0.00	0.00			
Chilipepper Rockfish	0.03	0.00		0.01	0.00	0.00	0.00	0.00	0.00	0.08		0.00	0.00	0.00		0.00	0.00
Chum Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corals-Bryozoans Unidentified				0.00									0.00	0.00			
Crab Unidentified				0.00									0.00	0.00			
Cutlassfish Unidentified	0.00			0.00									0.00	0.00			
Daggertooth				0.00									0.00	0.00			
Dark Blotched Rockfish	0.33	0.00	0.00	0.99	0.02	1.45	0.00	0.00	0.01	0.62	0.00	0.29	0.06	0.33	1.46	0.00	0.00
Deepsea Smelt Unidentified				0.00									0.00	0.00			
Dover Sole	0.00		0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	
Dragonfish Unidentified	0.00		0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00	0.00		
Dreamer Unidentified				0.00									0.00	0.00			
Duckbill Barracudina	0.00			0.00			0.00			0.00	0.00		0.00	0.00			
Eelpout Unidentified	0.00			0.03		0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00			0.00
English Sole				0.00			0.00						0.00	0.00			
Eulachon			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Fish Unidentified				0.01	0.00	0.01			0.00	0.00		0.03	0.00	0.00	0.01		
Fish Waste	0.00			0.00	0.00			0.00		0.00			0.00	0.00			
Flatfish Unidentified				0.00									0.00	0.00			
Flathead Sole				0.00							0.00		0.00	0.00			
Fork-Tailed Storm-Petrel				0.00									0.00	0.00			





Poacher Unidentified				0.00									0.00	0.00			
Pollock				0.00									0.00	0.00			
Pomfret Unidentified				0.00									0.00	0.00			
Prickleback Unidentified				0.00									0.00	0.00			
Ragfish	0.07			0.00	0.00					0.00			0.00	0.00			
Rainbow Smelt				0.00		0.00							0.00	0.00	0.00		
Red Banded Rockfish	0.00			0.01		0.02	0.00	0.00		0.01			0.00	0.00	0.00		0.00
Red King Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Redstripe Rockfish	0.03			0.00						0.06			0.00	0.00			0.00
Rex Sole	0.02		0.00	0.05		0.06	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.04	0.01	0.00	0.00
Ribbonfish Unidentified				0.03									0.00	0.00			
Rock Sole				0.00									0.00	0.00			
Rockfish Unidentified	0.00			0.00						0.00		0.00	0.00	0.00			
Rough Pomfret				0.00									0.00	0.00			
Rougheye Rockfish	0.09	0.00	0.00	0.22	0.07	0.58	0.00	0.00	0.01	0.13	0.00	0.67	0.12	0.04	0.56	0.00	0.00
Roundfish Unidentified				0.00			0.00						0.00	0.00			
Sablefish	0.83	0.00	0.00	6.04	0.00	0.91	0.16	0.00	0.19	0.80	0.00	0.16	0.76	1.51	0.54	0.05	0.00
Salmon Shark	0.00			0.00	0.00	0.00		0.00		0.00	0.00		0.00	0.00	0.00		0.00
Sandpaper Skate				0.00			0.00			0.00			0.00	0.00			
Scarlet King Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sea Anemone Unidentified				0.00		0.00							0.00	0.00	0.00		
Sea Cucumber Unidentified				0.00									0.00	0.00			
Sea Devil Unidentified				0.00			0.00						0.00	0.00			
Sea Pen-Sea Whip Unidentified				0.00									0.00	0.00			
Sea Urchins-Sand Dollars Unidentified				0.00									0.00	0.00			
Shark Unidentified				0.00									0.00	0.00			
Sharpchin Rockfish	0.00			0.00									0.00	0.00			
Shortbelly Rockfish		0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00		0.01	0.00	0.00	0.00	0.00	0.00
Shortraker Rockfish		0.00		0.00	0.00	0.02							0.00	0.00			
Shortspine Thornyhead	0.71	0.00	0.00	0.21	0.01	0.16	0.10	0.00	0.04	0.39	0.00	0.00	0.03	0.18	0.00		0.00
Shrimp Unidentified	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Silvergray Rockfish	0.00			0.00		0.00				0.00			0.00	0.00			
Skate Unidentified				0.00			0.00		0.00	0.00			0.00	0.00			
Slender Barracudina				0.00									0.00	0.00			
Slender Sole			0.00	0.00		0.00	0.00				0.00		0.00	0.00			
Snail Egg Unidentified				0.00									0.00	0.00			
Snail Shell Unidentified				0.00									0.00	0.00			
Snail Unidentified				0.00									0.00	0.00			
Snailfish Unidentified			0.00	0.00		0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00
Snipe Eel Unidentified				0.00						0.00			0.00	0.00			
Snow Crab, Opilio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sockeye Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sooty Shearwater				0.00									0.00	0.00			

Soupin Shark				0.00									0.00	0.00			
Spiny Dogfish Shark	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.04	0.00	0.00	0.00
Splitnose Rockfish	0.81		0.00	0.28	0.00	1.64	0.04	0.00	0.08	0.30	0.00	0.40	0.13	0.22	0.82	0.00	0.00
Sponge Unidentified				0.00									0.00	0.00			
Spookfish Unidentified				0.00									0.00	0.00			
Spotted Ratfish				0.00		0.00							0.00	0.00			
Squid Unidentified	0.00	0.00	0.00	2.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.25	1.11	0.98	0.22	0.00	0.00
Starfish Unidentified				0.00									0.00	0.00			
Steelhead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stripetail Rockfish			0.00	0.00							0.00		0.00	0.00			
Tanner Crab, Bairdi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thornyhead Rockfish Unidentified				0.00									0.00	0.00			
Thresher Shark				0.00	0.00								0.00	0.00			
Triangle Tanner Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tubeshoulder Unidentified				0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00			
Viperfish Unidentified				0.00		0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Western Gull				0.00									0.00	0.00			
White Barracudina				0.00			0.00			0.00			0.00	0.00			
Widow Rockfish	1.07	0.00	0.00	5.52	0.00	0.18	0.00	0.00	0.00	4.20	0.00	0.13	0.12	0.10	0.08	0.00	0.00
Yelloweye Rockfish				0.00									0.00	0.00	0.00		0.00
Yellowmouth Rockfish				0.00									0.00	0.00			
Yellowtail Rockfish	4.46	0.00	0.00	6.14	0.00	0.59	0.00	0.00		8.63	0.00	1.67	0.09	0.05	2.52	0.00	0.00

Table 5. Discarded Non-whiting and non-salmonid catch by vessel (mt).

	American Beauty	Leslie Lee	Lisa Melinda	Marathon	Miss Berdie	Miss Sarah	Muir Milach	Nordic Fury	Nordic Star	Pacific Challenger	Pegasus	Predator	Raven	Sea Storm	Seadawn	Seeker	Traveler
American Shad	0.00	0.08	0.08	0.01	0.33	0.27	0.01	0.01		0.00	0.03	0.55	0.01	0.14	0.26	0.12	1.70
Argentine Unidentified				0.00									0.00	0.00			
Arrowtooth Flounder	0.00	0.01	0.33	0.05	0.02	0.00	2.05	0.24	2.54	6.11	0.30	0.00	0.03	0.07	0.00	0.09	0.09
Ascidian - Sea Squirt - Tunicate Unident.	0.00		0.00	0.00			0.00		0.01	0.00	0.00		0.00	0.00			
Aurora Rockfish				0.00			0.00	0.00	0.00	0.00			0.00	0.00			
Bank Rockfish	0.00			0.00		0.00		0.00		0.00			0.00	0.00			0.00
Barnacles Unidentified				0.00									0.00	0.00			
Barracudina Unidentified	0.00			0.00			0.00			0.00			0.00	0.00			
Big Skate				0.00					0.03				0.00	0.00	0.08		
Blackgill Rockfish				0.00		0.00							0.00	0.00			

Blue King Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Blue Shark			0.29	0.22			0.16		0.04		0.38		0.10	0.04			
Bocaccio	0.00	0.04		0.00		0.00				0.01		0.00	0.00	0.00	0.00	0.01	
Brittle Starfish Unidentified				0.00									0.00	0.00			
Brown Cat Shark	0.22		0.57	2.53	0.29	0.34	1.59	0.18	0.76	1.43	0.16	0.17	0.61	2.14	0.28	0.13	0.11
Canary Rockfish	0.00	0.16	0.00	0.01	0.00	0.00	0.02	0.02	0.05	0.02		0.00	0.00	0.00	0.00		0.01
Capelin				0.00									0.00	0.00			
Chilipepper Rockfish	0.00	0.00		0.00	0.00	0.00	0.01	0.00	0.01	0.01		0.00	0.00	0.00		0.00	0.01
Chum Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Corals-Bryozoans Unidentified				0.00									0.00	0.00			
Crab Unidentified				0.00									0.00	0.00			
Cutlassfish Unidentified	0.00			0.00									0.00	0.00			
Daggertooth				0.00									0.00	0.00			
Dark Blotched Rockfish	0.00	0.02	0.29	0.04	0.33	0.02	0.63	0.50	0.65	0.84	0.08	0.13	0.01	0.59	0.01	0.71	0.40
Deepsea Smelt Unidentified				0.00									0.00	0.00			
Dover Sole	0.00		0.01	0.00	0.00	0.00	0.05	0.00	0.11	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dragonfish Unidentified	0.00		0.00	0.00	0.00	0.00	0.00			0.00			0.00	0.00			
Dreamer Unidentified				0.00									0.00	0.00			
Duckbill Barracudina	0.00			0.00			0.01			0.00	0.00		0.00	0.00			
Eelpout Unidentified	0.00			0.00		0.00	0.02		0.00	0.00	0.00	0.00	0.00	0.00			0.00
English Sole				0.00			0.00						0.00	0.00			
Eulachon			0.00	0.00	0.00		0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fish Unidentified				0.03	0.00	0.00			0.00	0.00		0.00	0.00	0.00	0.00		
Fish Waste	0.01			0.01	0.00			0.00		0.02			0.00	0.01			
Flatfish Unidentified				0.00									0.00	0.00			
Flathead Sole				0.00							0.00		0.00	0.00			
Fork-Tailed Storm-Petrel				0.00									0.00	0.00			
Golden King Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Greenstriped Rockfish				0.00									0.00	0.00			
Grenadier Unidentified				0.00		0.00	0.01					0.00	0.00	0.02			
Groovedtanner Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hagfish Unidentified				0.00									0.00	0.00			
Harlequin Rockfish				0.00									0.00	0.00			
Hermit Crab Unidentified				0.00									0.00	0.00			
Invertebrate Unidentified				0.01									0.00	0.01			
Isopod	0.00			0.00			0.00		0.00	0.00		0.00	0.00	0.00			
Jack Mackerel	0.01		19.96	0.86	0.12	0.00	4.00	0.01	1.38	7.61	37.53	0.90	0.31	2.22	0.00	0.17	0.00
Jellyfish	0.03	0.02	0.12	0.13	0.01	0.00	0.32	0.01	0.14	0.11	0.05	0.01	0.07	0.11	0.02	0.00	0.02
King-of-the-Salmon	0.00		0.39	0.21	0.45		0.59	0.09	0.65	0.16	0.24	0.08	0.11	0.38	0.03	0.11	0.11
Lamprey Unidentified	0.00			0.00		0.00						0.00	0.00	0.00	0.00		0.00
Lanternfish Unidentified	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lingcod		0.10	0.00	0.00		0.00	0.04		0.02		0.05	0.00	0.00	0.00	0.00	0.01	
Longnose Lancetfish	0.00		0.01	0.01				0.00		0.00			0.01	0.01		0.01	0.01

Longnose Skate	0.10			0.09	0.03	0.02	0.08	0.09	0.04	0.05		0.05	0.06	0.14	0.05	0.09	0.10
Longspine Thornyhead Rockfish				0.00		0.00	0.00						0.00	0.00			
Loosejaws Unidentified				0.00					0.00			0.00	0.00	0.00			
Manefish				0.00									0.00	0.00			
Medusafish	0.00		0.00	0.00	0.00		0.01		0.00	0.00			0.00	0.00		0.00	
Miscellaneous Unidentified	0.00		0.00	0.01		0.00	0.00		0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	
Mussels Oysters Scallops Clams				0.00									0.00	0.00			
Northern Anchovy				0.00									0.00	0.00			
Ocean Sunfish				0.00					0.51	0.01			0.00	0.00			
Octopus Unidentified			0.01	0.00		0.00	0.03		0.04	0.03		0.00	0.00	0.00	0.00		
Oxeye Oreo				0.00									0.00	0.00			
Pacific Cod				0.00									0.00	0.00			
Pacific Electric Ray				0.03									0.00	0.00			
Pacific Halibut	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Pacific Herring	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pacific Lamprey	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Pacific Mackerel	0.00		1.14	0.02	0.06	0.00	0.05	0.00	0.75	27.84	3.63	1.00	0.02	0.86		0.30	0.00
Pacific Ocean Perch	0.00	0.00	0.02	0.01	0.01	0.00	0.30	1.73	1.59	0.21	0.02	0.00	0.01	0.02	0.00	0.04	0.15
Pacific Pomfret				0.00			0.00						0.00	0.00			
Pacific Sand Lance				0.00									0.00	0.00			
Pacific Sanddab				0.00									0.00	0.00			
Pacific Sardine			0.00	0.00	0.00					0.01	0.00	0.01	0.00	0.01		0.00	0.00
Pacific Saury				0.00						0.00			0.00	0.00			
Pacific Sleeper Shark				0.03		0.04			0.01				0.03	0.11	0.00	0.14	
Pearleyes Unidentified				0.00									0.00	0.00			
Petrale Sole				0.00									0.00	0.00			
Pink Salmon	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Poacher Unidentified				0.00									0.00	0.00			
Pollock				0.00									0.00	0.00			
Pomfret Unidentified				0.00									0.00	0.00			
Prickleback Unidentified				0.00									0.00	0.00			
Ragfish	0.00			0.00	0.05					0.03			0.00	0.00			
Rainbow Smelt				0.00		0.00							0.00	0.00	0.00		
Red Banded Rockfish	0.00			0.00		0.00	0.00	0.02		0.01			0.00	0.00	0.00		0.01
Red King Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Redstripe Rockfish	0.00			0.00						0.01			0.00	0.00			0.00
Rex Sole	0.00		0.09	0.01		0.00	1.05	0.03	0.85	2.40	0.06	0.00	0.01	0.01	0.00	0.00	0.00
Ribbonfish Unidentified				0.00									0.00	0.00			
Rock Sole				0.00									0.00	0.00			
Rockfish Unidentified	0.00			0.00						0.00		0.00	0.00	0.00			
Rough Pomfret				0.00									0.00	0.00			
Rougheye Rockfish	0.00	1.39	0.14	0.08	1.48	0.00	0.27	0.01	0.34	0.94	0.04	0.00	0.01	0.53	0.00	0.70	0.00
Roundfish Unidentified				0.00			0.00						0.00	0.00			

Sablefish	0.00	0.00	1.94	0.23	0.13	0.00	4.01	1.30	2.45	4.29	0.76	0.03	0.23	0.90	0.00	1.85	0.85
Salmon Shark	0.83			0.34	0.43	0.24		0.07		0.38	0.27		0.01	0.61	0.26		0.44
Sandpaper Skate				0.00			0.00			0.00			0.00	0.00			
Scarlet King Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sea Anemone Unidentified				0.00		0.00							0.00	0.00	0.00		
Sea Cucumber Unidentified				0.00									0.00	0.00			
Sea Devil Unidentified				0.00			0.00						0.00	0.00			
Sea Pen-Sea Whip Unidentified				0.00									0.00	0.00			
Sea Urchins-Sand Dollars Unidentified				0.00									0.00	0.00			
Shark Unidentified				0.00									0.00	0.00			
Sharpchin Rockfish	0.00			0.00									0.00	0.00			
Shortbelly Rockfish		0.00	3.76	0.01	0.00	0.00	3.67		0.23	0.02		0.00	0.01	0.00	0.00	2.98	0.00
Shortraker Rockfish		0.02		0.00	0.01	0.00							0.00	0.00			
Shortspine Thornyhead	0.00	0.00	0.90	0.09	0.00	0.00	4.32	0.03	7.65	9.71	0.60	0.00	0.02	0.09	0.00		0.09
Shrimp Unidentified	0.00		0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Silvergray Rockfish	0.00			0.00		0.00				0.00			0.00	0.00			
Skate Unidentified				0.00			0.01		0.00	0.00			0.00	0.00			
Slender Barracudina				0.00									0.00	0.00			
Slender Sole			0.00	0.00		0.00	0.00				0.00		0.00	0.00			
Snail Egg Unidentified				0.00									0.00	0.00			
Snail Shell Unidentified				0.00									0.00	0.00			
Snail Unidentified				0.00									0.00	0.00			
Snailfish Unidentified			0.00	0.00		0.00	0.00	0.00	0.00	0.01			0.00	0.00	0.00	0.00	0.00
Snipe Eel Unidentified				0.00						0.00			0.00	0.00			
Snow Crab, Opilio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sockeye Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sooty Shearwater				0.00									0.00	0.00			
Soupfin Shark				0.00									0.00	0.00			
Spiny Dogfish Shark		0.01	1.59	11.16	0.23	0.47	5.16	0.27	5.06	6.28	0.98	0.22	13.37	12.50	0.25	0.20	0.25
Splitnose Rockfish	0.00		0.11	0.17	0.14	0.00	1.72	0.86	7.32	2.57	0.10	0.01	0.05	0.43	0.00	0.95	0.78
Sponge Unidentified				0.00									0.00	0.00			
Spookfish Unidentified				0.00									0.00	0.00			
Spotted Ratfish				0.00		0.00							0.00	0.00			
Squid Unidentified	0.52	0.01	1.27	3.28	0.49	0.00	5.24	0.21	3.28	4.22	1.14	0.02	2.27	2.79	0.00	0.20	0.19
Starfish Unidentified				0.00									0.00	0.00			
Steelhead	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Stripetail Rockfish			0.00	0.00							0.03		0.00	0.00			
Tanner Crab, Bairdi	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thornyhead Rockfish Unidentified				0.00									0.00	0.00			
Thresher Shark				0.00	0.22								0.00	0.00			
Triangle Tanner Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tube-shoulder Unidentified				0.00	0.00		0.00		0.00	0.00	0.00	0.00	0.00	0.00			
Viperfish Unidentified				0.00		0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00

Western Gull				0.00									0.00	0.00			
White Barracudina				0.00			0.00			0.00			0.00	0.00			
Widow Rockfish	0.02	0.03	0.47	0.06	0.03	0.00	0.89	0.15	0.82	0.43	0.58	0.04	0.07	0.80	0.00	0.44	5.32
Yelloweye Rockfish				0.00									0.00	0.00	0.00		0.00
Yellowmouth Rockfish				0.00									0.00	0.00			
Yellowtail Rockfish	0.05	3.94	0.05	0.04	0.13	0.00	0.04	0.67		0.27	0.08	0.00	0.04	0.04	0.00	0.17	0.73

## Attachment 2 Sea State Daily Report

Harvesting Vessel	Processing Vessel	Most Recent Haul Date	Most Recent Haul Number	Pacific Hake Allocation	Pacific Hake Remaining	Pacific Hake	Canary Rockfish	Widow Rockfish	Dark Blotched Rockfish	Pacific Ocean Perch	Chinook Salmon	Yellowtail Rockfish	Sablefish
American Beauty	Golden Alaska	5/28/2023	1128	3,091.8	661.5	2,430.0	0.0	1.1	0.3	0.0	45.0	-	0.8
Bay Islander	Arctic Storm	-	-	109.4	109.4	-	-	-	-	-	-	-	-
Leslie Lee	Arctic Fjord	6/3/2023	1083	2,157.6	2,019.3	138.0	0.2	0.0	0.0	0.0	-	-	0.0
Lisa Melinda	American Empress II	9/20/2023	453	5,105.2	2,308.8	2,796.0	0.0	0.5	0.3	0.0	12.0	-	1.9
Lisa Melinda	American Empress II	-	-	1,689.4	1,689.4	-	-	-	-	-	-	-	-
Marathon	Arctic Storm	10/16/2023	168	2,595.3	-	2,595.0	0.1	5.6	1.0	0.2	121.0	-	5.7
Marathon	Arctic Storm	10/18/2023	177	170.7	-	171.0	-	-	0.0	0.0	-	-	0.1
Marathon	Arctic Storm	10/25/2023	217	3,399.7	2,718.7	681.0	-	0.0	0.0	0.0	3.0	-	0.4
Mark I	Excellence	-	-	2,473.4	2,473.4	-	-	-	-	-	-	-	-
Miss Berdie	Arctic Fjord	6/3/2023	1084	2,782.6	1,567.0	1,216.0	0.0	0.0	0.4	0.0	3.0	-	0.1
Miss Berdie	Arctic Storm	-	-	2,362.1	2,362.1	-	-	-	-	-	-	-	-
Miss Sarah	Arctic Storm	5/31/2023	1077	2,133.3	1,138.0	995.0	0.0	0.2	1.5	1.8	79.0	-	0.9
Muir Milach	American Empress II	9/7/2023	410	1,237.0	-	1,237.0	-	0.1	0.1	0.0	2.0	-	0.6
Muir Milach	American Empress II	9/22/2023	461	1,007.0	-	1,007.0	-	0.0	0.2	0.0	10.0	-	0.7
Muir Milach	American Empress II	11/1/2023	609	7,634.0	5,847.2	1,787.0	0.0	0.7	0.3	0.3	139.0	-	2.9
Muir Milach	American Empress II	-	-	1,112.0	1,112.0	-	-	-	-	-	-	-	-
Nordic Fury	American Empress II	6/2/2023	309	3,091.8	2,401.1	691.0	0.0	0.1	0.5	1.7	35.0	-	1.3
Nordic Fury	American Empress II	-	-	1,758.6	1,758.6	-	-	-	-	-	-	-	-
Nordic Star	American Empress II	11/1/2023	607	5,124.4	2,872.9	2,252.0	0.1	0.8	0.7	1.6	119.0	-	2.7
Nordic Star	American Empress II	-	-	1,007.0	1,007.0	-	-	-	-	-	-	-	-
Pacific Challenger	American Empress II	10/8/2023	516	455.0	-	455.0	0.0	0.1	0.3	0.1	2.0	-	0.7
Pacific Challenger	Golden Alaska	5/28/2023	1129	2,933.6	648.9	2,285.0	0.1	4.3	0.6	0.0	45.0	-	0.6
Pacific Challenger	American Empress II	11/1/2023	608	2,000.0	908.1	1,092.0	0.0	0.2	0.6	0.1	223.0	-	3.8
Pegasus	American Empress II	8/29/2023	382	3,091.8	1,672.6	1,419.0	-	0.6	0.1	0.0	8.0	-	0.8
Pegasus	American Empress II	-	-	2,987.9	2,987.9	-	-	-	-	-	-	-	-
Predator	Arctic Fjord	5/15/2023	1029	625.0	236.9	388.0	-	0.0	0.1	-	-	-	0.0
Predator	Arctic Storm	5/31/2023	1078	2,133.3	1,151.1	982.0	0.0	0.1	0.3	1.8	11.0	-	0.2

Raven	Arctic Storm	10/25/2023	218	3,388.6	1,389.4	1,999.0	0.0	0.2	0.1	0.0	41.0	-	1.0
Sea Storm	Arctic Fjord	5/31/2023	6000	2,782.6	1,496.0	1,287.0	0.0	0.8	0.7	0.0	78.0	-	0.8
Sea Storm	Arctic Fjord	-	-	618.4	618.4	-	-	-	-	-	-	-	-
Sea Storm	Arctic Storm	10/6/2023	121	618.4	-	618.0	0.0	0.1	0.0	0.0	11.0	-	0.1
Sea Storm	Arctic Storm	10/25/2023	216	4,317.4	2,609.8	1,708.0	-	0.1	0.1	0.0	41.0	-	1.5
Seadawn	Arctic Storm	6/3/2023	1082	2,133.3	1,156.4	977.0	0.1	0.1	1.5	0.1	24.0	-	0.5
Seadawn	Arctic Storm	-	-	618.4	618.4	-	-	-	-	-	-	-	-
Seeker	Arctic Fjord	6/3/2023	1082	2,782.6	1,729.9	1,053.0	-	0.4	0.7	0.0	58.0	-	1.9
Traveler	American Empress II	6/2/2023	310	3,091.8	2,440.3	651.0	0.0	5.3	0.4	0.2	106.0	-	0.8
Traveler	American Empress II	-	-	2,007.2	2,007.2	-	-	-	-	-	-	-	-



**Attachment 6**

**Whiting Mothership Cooperative**

An Amendment 20 Mothership Catcher Vessel Cooperative

Salmon Mitigation Plan Postseason Report on the 2023 Pacific Whiting Fishery

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## Purpose of Report

The Whiting Mothership Cooperative is submitting a Salmon Mitigation Plan (SMP) Report for the 2023 season on behalf of its membership, all of whom are party to SMP-2023-01. This report is intended to disclose all information required or identified in 50 CFR 660.113(e)(6).

## SMP Report Requirements

(6) ***SMP postseason report.*** The designated SMP representative for an approved SMP must submit a written postseason report to NMFS and the Council for the year in which the SMP was approved.

(i) ***Submission deadline.*** The SMP postseason report must be received by NMFS and the Council no later than March 31 of the year following that in which the SMP was approved.

(ii) ***Information requirements.*** The SMP postseason report must contain, at a minimum, the following information:

(A) Name of the SMP and SMP identification number.

(B) A comprehensive description of Chinook salmon bycatch avoidance measures used in the fishing year in which the SMP was approved, including but not limited to, information sharing, area closures, movement rules, salmon excluder use, and internal bycatch guidelines.

(C) An evaluation of the effectiveness of these avoidance measures in minimizing Chinook salmon bycatch.

(D) A description of any amendments to the terms of the SMP that were approved by NMFS during the fishing year in which the SMP was approved and the reasons the amendments to the SMP were made.

### **(A) Name of the SMP and SMP identification number.**

Salmon Mitigation Plan for the Whiting Mothership Cooperative. SMP identification number: SMP-2023-01

### **(B) A comprehensive description of Chinook salmon bycatch avoidance measures used in the fishing year in which the SMP was approved, including but not limited to, information sharing, area closures, movement rules, salmon excluder use, and internal bycatch guidelines.**

In 2023, the WMC consistently shared information regarding Chinook salmon encounters amongst its members as well as with the Catcher Processor and Shorebased Cooperatives. Information sharing is critical to raising the fleets awareness of when and where Chinook are

prevalent during the season and in preventing unnecessary lightning strikes. The Cooperative implemented area closures, movement rules and additional internal bycatch guidelines to minimize Chinook bycatch. Lastly, the Cooperative required all participants to utilize a salmon excluder, designed with escapement panels to encourage salmon to exit the net.

**(C) An evaluation of the effectiveness of these avoidance measures in minimizing Chinook salmon bycatch.**

In 2023, the Cooperative caught 1,172 Chinook, 10.7% of the 11,000 fish Chinook guideline. The Cooperative's avoidance measures, specifically its internal movement rules and salmon excluder use, were effective at minimizing Chinook bycatch. Individual mothership fleets, defined as one mothership processor and all of the catcher vessels delivering to it, moved 25 times in 2023 to avoid Chinook incidental catch. The moves shifted effort to areas where the likelihood of Chinook encounters was lower, albeit at a significant economic cost. Additionally, the Cooperative's use of salmon excluders continues to minimize Chinook bycatch. While the effectiveness of excluders is dependent on individual vessels and their unique gear configurations, recent EFP studies in the Bering Sea Pollock fishery have shown possible salmon escapement of 15-40% in vessels with comparable horsepower and gear to those in the whiting mothership fishery.

**(D) A description of any amendments to the terms of the SMP that were approved by NMFS during the fishing year in which the SMP was approved and the reasons the amendments to the SMP were made.**

No amendments to the SMP were made in 2023.